A wellness system: the challenge for health professionals

Ian D Coulter, PhD*

Beginning with the Lalonde Report, the Federal Government has consistently articulated a new perspective for health whose objective is to move away from a preoccupation with disease and move towards promoting health and wellness. Taken seriously this perspective would logically imply either a new kind of "health" delivery system (a wellness system) and/or a new kind of practitioner, a wellness practitioner. With regard to the latter this would imply either "retooling" present illness practitioners or considering alternative wellness practitioners. There are cogent reasons why the former is not a realistic option. On the other hand, the universities have shown little enthusiasm to date for including those alternative health professionals whose practices already resemble that of a wellness practice, that is, are not focused on serious trauma or disease and that include such things as exercise, nutrition, posture, weight, stress management etc. Currently this includes, but is not limited to, chiropractors, osteopaths, naturopaths, homeopaths. (JCCA 1993; 37(2):97-103)

KEY WORDS: health, health promotion, alternative medicine, health personnel.

Depuis le Rapport Lalonde, le gouvernement fédéral n'a cessé d'établir les bases d'une nouvelle perspective en matière de santé visant à s'éloigner du point de vue de la maladie pour se tourner vers la promotion de la santé et du mieux-être physique. Cette perspective, si elle est prise au sérieux, implique logiquement soit un nouveau système de soins de santé (un système de mieux-être), soit un nouveau type de praticien, un médecin du mieux-être. Cette dernière approche exige à son tour de fournir de «nouveaux outils» aux actuels praticiens de la maladie, ou de faire appel à des nouveaux praticiens du mieuxêtre. Plusieurs raisons importantes amènent à croire que la première approche n'est pas une option réaliste. Par ailleurs, les universités ont démontré fort peu d'enthousiasme à ce jour quant à l'inclusion dans le système médical actuel des professionnels de la médecine alternative dont les pratiques se rapprochent de la pratique du mieux-être, c'est-à-dire ne mettant pas l'accent sur les traumatismes graves ou sur la maladie et s'occupant de la nutrition, de l'exercice physique, de la posture, du poids, de la gestion du stress, etc. Actuellement, ces praticiens comprennent entre autres les chiropraticiens, les ostéopathes, les naturopathes et les homéopathes. (JCCA 1993; 37(2):97-103)

MOTS CLÉS: santé, promotion de la santé, médecine alternative, personnel de la santé.

Introduction

"The ideas involved are not new. But they seem to have been forgotten in our preoccupation with caring for sickness and disease, rather than encouraging health . . . Preoccupation with disease and its prevention lends us to equate health with absence of disease . . . So if we truly wish to promote health, the

way we think needs to be challenged and we need to add new dimensions to that thinking . . . I want to link health policy to quality of life . . . I want health policy to support individuals' capacity to function and participate in their communities and their opportunities to exercise freedom of choice."

Hon. J. Epp¹

Beginning with the Lalonde Report, and culminating in the report "Achieving Health for All: A Framework for Health Promotion", the Canadian Federal Government has consistently articulated a change in the perspective applied to health and health care. While this change has not, as yet, resulted in a fundamental change in the allocation of resources for health

Researcher, Los Angeles College of Chiropractic 16200 E. Amber Valley Drive
 P.O. Box 1166
 Whittier, California 90609

[©] JCCA 1993.

care, or transformed the health care delivery system, it has established an alternative context in which to view the Canadian health care system and the education of its health care professionals

A full discussion of this new perspective is beyond the purpose of this paper, but the perspective accepts that the present focus of our health care system is too illness dominated and too reliant on practitioners and tertiary care institutions. The solutions offered embrace greater individual responsibility for one's health, broad education and/or promotional programs aimed at changing health attitudes and behaviour, and the education of present health practitioners to reinforce such programs. The new system of health care would give a strong role to disease prevention and health promotion, would strengthen and reinforce self-care and self-help, would stress community health, and would be more interdisciplinary.

This "new perspective in health" poses fundamental policy issues. As Milio³ has noted, public policy is an inseparable part of health care. This is true not only because many of the programs necessary to promote health will be broad public programs, but because even at the level of personal behaviour, lifestyle cannot be isolated from the alternatives that are available and that are the result of policy choices (e.g. one cannot choose to live in a smoke-free environment in the absence of public policy banning smoking in public places).

The perspective also poses a fundamental challenge to the way we currently educate health professionals. Taken to its logical conclusion it suggests the need for at least the following:

- 1 a fundamental restructuring of the curriculum of present mainstream health professionals and/or
- 2 the recognition and development of alternative/complimentary health professionals reflective of the new perspective, and
- **3** a radical transformation in the health settings in which such professionals are educated.

For reasons discussed later in this paper, it is highly unlikely that the first will occur and if it did, that it would be a solution to the problem. However, the paper will argue that both the second and third are not only viable, they are also probable.

The changing health care system

Any comprehensive study of the provision of health care, and the challenges that are developing with regard to delivering that care, must take into account the changing social, political, professional and economic context since the health system is simply one component of the broader structure of society. It both impacts upon, and is itself impacted by, this structure.

Two social factors stand out as posing fundamental challenges, the aging of the population and the health problems associated with lifestyle. The first poses not only a major economic challenge but also an educational one. It is not the elderly who are the problem, it is the elderly that are dependant, because of health problems, on expensive and limited institutional care. Furthermore, education in geriatric care has not

constituted an important part of mainstream education. While degenerative diseases cannot be prevented or cured, programs oriented towards delaying their onset, and the improvement of patient functioning during their life span, are possible. The second is proving to be a major health challenge because while some diseases related to lifestyle are life-threatening, they are theoretically preventable. It is also clear that the present health care system has had very minimal impact on these conditions.

In the political arena, two factors will have a major impact on health. The first may be termed the consumerization of health. Patients are becoming increasingly assertive with regard to their health, with regard to exercising choices in health care, and with regard to acceptable health care. Important consumer groups now actively lobby for patient's rights. On the positive side patients will take a much more active interest in health and wellness, preventive care, and health enhancement; but on the negative side, will become more litigious towards health professionals. The second factor is the politicization of health. Groups and communities are demanding a much greater participation in the shape of the health care system and the allocation of resources to it. The clearest expression of this process to date is the feminist movement, but the action of the gay community vis-avis treatment for AIDS is another current example. Strikes by health professionals such as medical doctors and nurses signal the extent to which the system is already politicized.

Several major changes are likely to occur in the area of professionalism. The first will be a lessening of professional dominance of all kinds, but in particular, of medical dominance, partly because of the political factors described above, but also because health care will be increasingly multi-disciplinary with a concomitant sharing of power. Health professionals will be forced to change the way they think about health and their education. As the system moves from a focus on illness and sick care to one of wellness and health care, and from treatment to prevention, promotion and health enhancement, present health professionals will also need to change their competencies. Existing alternative professionals may become established as important players in the system, along with newly emerging professionals. Increasingly, a new division of labour may be hammered out among these groups but probably not without considerable conflict. Last, but not least, health professionals will be confronted by a public increasingly disillusioned by highly bureaucratized, highly impersonal, highly institutionalized, and highly technical forms of care. This, combined with escalating iatrogenic illness, may also result in a greater demand for conservative, personalized, intimate, intelligible, co-operative, and holistic forms of health care.

Of all the factors confronting the health delivery system, none are more threatening than the economic ones. Despite increasing expenditures the population is not becoming, comparatively speaking healthier. The escalating costs of what already exists threatens universal accessibility and threatens the budget available for other social services. These economic concerns will be expressed on several fronts. First, there will be a confrontation

with provider generated costs. In the USA this has resulted in the development of Health Maintenance Organizations (HMO's), Preferred Providers, and various capitation schemes. Second, there will be a confrontation with patient generated costs and particularly those arising from abuse of the system and inappropriate use of the system. A major problem will be to reconcile the consumer's right to choose alternatives with the state's obligation to pay. Third, the escalating costs of hospital based, technological medicine must be contained. Fourth, there will be the problem of how to meet the cost of preventive care, health promotion, etc. At least initially such costs must be add ons. Fifth, a major issue will be effective, economical use of resources. Fundamentally, this is an issue of the right persons, receiving the right type of care, at the right time, for the right reasons, from the right professionals. Differing forms of health care and health professionals are not equally expensive or effective. At present there is a considerable lack of rationality in the utilization of health services both as a result of patient ignorance but also because of interprofessional rivalry.

The economic situation therefore looks somewhat depressing. There are escalating costs for what we have presently; there are escalating expectations on the part of the public for government funded health care; there is an expanding array of health professionals all competing to be covered by government funding; and there is an escalating consumption, by health care, of the available government funds for all social programs.

It is within this set of social, political, professional and economic factors that we must place the education of health professionals, and it is this set of issues that the universities, and the health faculties and schools, must come to grips with. While individual professions have examined the New Perspective on Health, and its impact on them, there seems to be no concerted effort amongst the universities to collectively deal with these matters outside of their own point of view. That is, to consider the needs for new or alternative health professions to service the wellness needs of the population. There is in fact an assumption that the present university based health professions will suffice and that the present constellation of the academic health science centers will continue as constituted. As this article will suggest it is unlikely that the present health professions can meet the need for wellness practitioners, or that they will.

The solutions

Quite clearly the Federal Government in Canada sees the area of health promotion and individual responsibility for health as major elements in the solution. In some senses the Federal and Provincial Governments are saying that the state will provide treatment for illness but the individual will take responsibility for health and wellness. This response may be termed the consumer imperative (Participaction was a clear illustration of this same policy).

On one level, it is correct that people must accept responsibility for their own health. But this is equally true for illness. An individual cannot be treated for illness without taking some

responsibility for the care (hence the research on compliance). The difficulty arises when attempting to put this approach into practice. The illness delivery system in our society is quite well known. Most of us are born into it, will spend some time in it during our life, and will die in it (for the most part). It is portrayed in the media constantly and most individuals have some knowledge of how it functions.

In contrast, the health delivery system (i.e. wellness care) is relatively unspecified, often unregulated, and information on wellness is unsystematized. Where, on the illness side, it is possible to identify established disciplines with recognized bodies of knowledge, on the wellness side there is no agreement on any recognized discipline, with the exception perhaps of nutrition (although considerable disagreement about what constitutes nutrition and who is qualified to practice it). Persons in our culture usually know how to access the illness system, and who the major players are in the system. For wellness care this type of knowledge does not exist.

Given these factors, at the present time the individual is not in a position to exercise the consumer imperative and individual responsibility with regard to health, and the consumer perspective will be no more successful than it has been for illness. In the case of illness, care has been practitioner based in all cultures (whether it was a shaman, witch, witchdoctor, medicine man or medical physician). It would seem that the practitioner based delivery system meets a fundamental need in the human condition of illness.

The Lalonde wellness approach therefore, fails to identify the need for wellness practitioners and the need for a wellness delivery system. It is likely that individuals will need as much help with wellness as they currently do with illness.

A wellness delivery system

In considering such a delivery system we are confronted with an initial problem of definition. While it is now accepted that wellness is not simply the absence of disease, there is considerable variance among the various authors in their definitions. The definition presented for the Wellness Conference in Toronto stated:

"Wellness is more than a concept. It is a way of life, an integrated enjoyable approach to living that emphasizes the importance of achieving harmony in all parts of the person; mind, body and spirit. It is a lifestyle that creates the greatest potential for personal well being. More than an absence of illness, it is a balance among all of the aspects of the person".

Another way of expressing wellness is to look at the various stages the treatment cycle of ill health has gone through in the last hundred years, which can be summarized as:

- 1 focus on disease process (focus of traditional medicine)
- 2 to a focus on preventive measures (public health programs)
- 3 to a focus on health promotion and health education (the present focus of the Canadian Government)

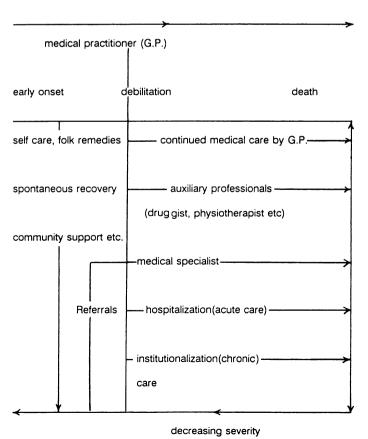
4 to a focus on health enhancement (the focus of the wellness movement).

While absence of illness may be a necessary condition for wellness it is not a sufficient condition. In the area of illness we can clearly identify a continuum of severity with an accompanying delivery system which in some ways represents opportunities for interceding in the process.

In this model, at the point at which a practitioner intercedes (in our case a medical general practitioner), the patient has moved into a highly organized, systematized delivery system. However, the intervention occurs at a point, for the most part, beyond preventive care. Because our intervention frequently occurs either when trauma or the disease process is advanced, the gatekeeper (the medical practitioner) is by necessity an illness practitioner, one educated and trained primarily for the diagnosis and treatment of acute health crises and the disease process. This does not deny that medical practitioners are also involved in preventive care, health promotion and health educa-

Figure 1
Figure Showing Delivery System
for Illness Care

increasing severity



tion. However, their major focus is not this, and given the fact that persons do not generally go to them unless they have a specific illness or injury, their ability to be effective here is limited. Furthermore, the focus of their education is certainly not in these areas.

To be effective a wellness system must be able to intercede much earlier in the process and must have a focus whose aim is to prevent the onset of illness or injury to begin with. As mentioned earlier, to be effective it will need to be practitioner based. Individuals will need considerable assistance and guidance in the pursuit of health. A system could be devised, therefore, where a primary contact, health practitioner acts as the portal of entry into a supportive system of health enhancement. While no one practitioner will be competent to deliver all the care required, it is essential, for the safety of the public, that the practitioner is competent to diagnose those conditions that are contraindicated for wellness care and that need to be referred to an illness practitioner. Traditionally, medicine has argued that it is the only professional group capable of doing this, but both chiropractors, osteopaths, and in some situations, the nurse practitioner, have demonstrated very clearly that other practitioners are capable of acting as primary contact physicians without endangering the health of the public.5

From this point on, the two types of practitioners (the wellness and illness practitioner) would be quite distinct. Interestingly enough, both have ancient historical roots in classical medicine. One school of thought, the Acsculapian school, came to view disease as arising from specific causes and giving rise to predictable diseases (and symptoms). The purpose of the practitioner was to seek the cause and the cure by treating the disease entity. Here the practitioner intervenes between the patient and the disease. This school came to dominate contemporary, scientific medicine. The second school, the Hygeian school of thought, was based on vis medicatrix naturae, on the body's natural ability to heal itself. Here the view of the practitioner was quite different. The role was one of a facilitator, of helping the body's natural processes. "In this view it is the patient who gets well and not the doctor who makes him well. Cure comes from within or not at all. Nor can health - any more than courage, integrity, or wisdom – be imparted by one person to another".6

In the 19th century, allopathic medicine, through the germ theory of disease, took a giant step in its understanding of disease and illness. Under its impact came the development of biomedicine in the 20th century. Lost sight of, because of its success and dominance, was the fact that several alternative paradigms (all sharing the concept of "vis medicatrix naturae") arose in opposition. These included such groups as osteopathy, chiropractic, naturopathy, homeopathy and holistic medicine. Their disagreement with the new allopathic medicine was: that the germ theory of disease could give no explanation of why one individual became ill and another did not, even though they shared the same bacterially dangerous environment; that the focus was on symptoms and specific etiologies and not on

causes; that the concept of disease had supplanted that of illness; and that allopathic medicine abandoned an holistic approach to health.

Out of this confrontation arose: differing metaphysical beliefs to allopathic medicine (for the most part a belief in vitalism); different philosophies of health (holism verses reductionism); a different set of principles (e.g. the principal of homeostasis); a distinct set of therapies (usually natural therapies): different theoretical explanations; and differing languages and concepts for explaining health. Along with these there also developed unremitting conflict between allopathic medicine and the alternatives. While medicine has portrayed this conflict as one over science verses quackery and unsubstantiated practices and has claimed to be acting in the public's interest in opposing the alternatives, the recent decision of the Courts in the USA in the Wilk's case whereby several chiropractors successfully sued the AMA (among others) for restraint of trade has established clearly that the opposition had economic grounds as well.⁷

In recent years there has been an upsurge in the interest in this type of practitioner, particularly in the area of holistic medicine. Writers such as Gordon⁸ have postulated a new paradigm to counter biomedicine. Capra⁹ notes that the biomedical model can only be transcended by a shift to a new paradigm. This paradigm would focus on the interplay of spiritual, cultural, psychological, and biological factors with homeostasis a core concept. The literature describing this new form of practitioner may be summarized as saying: they must be holistic, humanistic, naturalistic (have a preference for natural therapies), conservative, (the least therapy is the best therapy), equalitarian, personable (low level of technology, high level of personal care), and caring. The areas described as of major conern to such practitioners include nutrition, stress, exercise, diet, the family, occupational health, psychology, the musculo-skeletel system, etc. As Capra notes "general practitioners administering this type of primary care need not be medical doctors, nor experts in any of the scientific disciplines concerned, but they will have to be sensitive to the multiple influences affecting health and illness and able to decide which of these is most relevant, best known, and most manageable in a particular case". In essence, what is described as a holistic practitioner is the same thing as is described here as a wellness practitioner.

But such groups as chiropractic, osteopathy, homeopathy, and naturopathy have already functioned for over 100 years in this role. While their major focus may have been, for example for osteopaths and chiropractors, the neuro-musculo-skeletal system and manipulation, this has been done within a holistic framework. Such areas as posture, exercise, nutrition, stress, have always been a part of these alternative paradigms. Furthermore, these practitioners, for the most, have not been involved in life-threatening traumas, or the disease processes. They have practiced in a way very close to what would now be termed a wellness practitioner. Similar comments could be made with respect to other groups and more recently with regard to the nurse practitioner.

Matters of curriculum

Both from the analysis presented by the Federal Government,² and the one presented here on the changing health care system, it is clear that a new need is arising in the system for a type of practitioner that the universities have, to date, largely ignored. While some of the professions within the university system include parts of the wellness paradigm (e.g. the nurse practitioner, exercise physiologist, health promotion and education) none of these are primary contact professions and none is being prepared for a wellness delivery system. The university education system is focused overwhelmingly, in the health field, on illness and sick care and includes those mainstream professions that deliver this form of care (medicine, nursing, dentistry, pharmacy). Where other groups such as Health and Physical Education are sometimes included in the health sciences, it has often been more for administrative convenience than any basic reorientation of thinking about health.

The challenge that this new perspective presents to university based education can best be illustrated by an example: osteopathy. In the United States, through political accommodation, osteopathy became, in effect, part of allopathic medicine (and their degree, a medical degree). Several of their colleges became part of the state university system. One such college was the Texas College of Osteopathic Medicine. Over recent years, this College had conducted a very critical re-examination of its curriculum and its goals and in the process has offered a serious critique of present university health science education.

In 1978, the Texas Osteopathic College, increasingly worried by such issues, instituted a curriculum task force to examine the educational goals of the College. Their approach to the task was itself unique. They re-examined the state of the health of Americans and the health care system, to not only identify health needs that were not being met, but also to examine how well the College goals and objectives reflected the needs of society. It resulted in a fundamental shift being proposed in curriculum emphasis, and a set of goals relevant to the unmet needs of society. Their conclusion was that their curriculum was largely irrelevant to both the health needs of the population but also increasingly irrelevant to the demands of a typical osteopathic practice. In essence they have evolved a medical, illness curriculum for an ambulatory, largely wellness, practice.

The task force was clear on the basic problem – as they saw it – "The basic problem seems to be in the very goals and strategy guiding medical care today. As long as the government and the people believe that medicine is the source of health, and as long as the medical physician is the dominant force in the system, they will continue to be the main decision makers. The physician's perspectives, understanding, attitudes, knowledge, and skills are the main determinants of the quality, value and cost of medical care." They also concluded that educationalists need to seriously reconsider the education of health professionals.

In 1980, the Texas College of Osteopathic Medicine became in effect the first medical school in the United States, and perhaps the world, to commit itself to a health oriented curriculum. This curriculum gave much more attention to: factors that influence health favourably or unfavourably (nutrition, psychological factors, human ecology, the human framework, physical fitness); human develpoment; and processes of effective communication. In the area of clinical experience they reduced hospital-based training, and increased expertise in outpatient clinics, private offices, and ambulatory care. The students are not being prepared for practice in hospitals but to know how to utilize them (the object being to keep people out of hospitals). They are being prepared for general practice and as front line health providers.

I have discussed this example extensively because it clearly illustrates a creative solution to the problems facing the health care (wellness) system and clearly illustrates that it is in the area of education that fundamental changes will have to occur. It also demonstrates that other paradigms exist besides biomedicine that might be more appropriate to the problems. This also raises the question of whether what is required is simply some changes in medical education.

There are, I believe, very cogent arguments of why this new perspective cannot be built on allopathic medicine, and even stronger arguments of why it will not be. None of this precludes elements of this paradigm being incorporated into medicine; in fact, this is already occurring. But the transformation required goes well beyond this. Thomas Kuhn¹¹ in his analysis of scientific paradigms, has established clearly that each paradigm is founded on core, apriori, assumptions and that while a paradigm can tolerate counter-evidence, and auxiliary hypothesis, it cannot survive challenges to its core. The problem with biomedicine is that its core assumptions are inappropriate (even contradictory) to wellness. The paradigm poses the wrong questions, poses them in the wrong way, at the wrong time, and accepts the wrong solutions if one is committed to a holistic paradigm. It is not inappropriate in the area of illness, and in fact, is the single most powerful paradigm ever developed for understanding disease processes.

Even where medicine has incorporated holistic concepts as Kidel notes it "still regards physical illness as something to be avoided at all costs, and many so-called holistic treatments seem to offer little more than an escape from immediate physical symptoms". ¹² They still turn to fixes to alleviate symptoms. To paraphrase Kidel, wellness practice is considerably more than biomedicine plus sensitivity training and improved communication skills.

Apart from medicine's ability to transform itself there are more pragmatic reasons why it will not. Biomedicine has had considerabale achievements, both in research and therapy. Given that many persons will continue to be diseased, subject to trauma, and ill, and given that this paradigm is still generating considerable success at the level of knowledge and research, there is nothing to suggest that it will not continue, or that it would not be necessary to continue. There are no historical precedents of scientific paradigms as successful as biomedicine being replaced prior to a paradigm crisis or at a point that its

research program is still making significant achievements. In fact, Kuhn's work has suggested that it is rational to continue with a paradigm even when there is strong counter evidence to its major assumptions as long as it is producing a period of normal science. The dispute therefore is only about its relevance to wellness, not to illness, and therefore, about its limitations.

If medicine was to take on the role of wellness practitioner it would require a revoution in medical education far exceeding that proposed in the recent study, Physicians For The 21st Century (considered to be the most radical assessment of medical education since the Flexner Report in 1910). ¹³ While this report contains much of the new perspective, it falls considerably short of what will be required to meet the health needs of the populace.

A pragmatic reason also arises as soon as the question is posed of where in the contemporary medical curriculum the program would be expanded to encompass health. A major problem of medical education is already information overload and stress. In addition to the knowledge explosion in biomedical science, a similar body of knowledge on health and wellness would now be added. Furthermore, medical faculties already represent firmly entrenched interest groups resistant to radical change (the current battles over such traditional subjects as anatomy and their place in the medical curriculum illustrate how difficult the transformation would be). It is simply not realistic to expect medicine to take on the additional burden of wellness. and furthermore, it is not necessary. Unfortunately, medicine's dominance of the system will probably ensure that it will oppose any attempt to develop alternative practitioners who may be an economic threat or who may threaten medicine's position as the gatekeepers of the system. For this reason, it is highly unlikely that such a new perspective would be developed within universities presently having a faculty of medicine.

In summary therefore, clearly there are *health* needs not being met by the present system, and those that are being met threaten to overwhelm the whole system economically. It is equally clear that education provides either part of the solution, or the solution. The challenge for the university, therefore, is whether it wishes to respond to this need, to be a partner with the government in the solution, or find itself increasingly irrelevant in the field of health and subjected to the same social critique presently bedeviling medicine. To be part of the solution does require a radical rethinking about health and health professionals and the role of the university in developing both.

Summary

The development of alternative health sciences in any Canadian university will be a step into the unknown. However, it is equally clear that the problems facing the health care system require a drastic rethinking of the concept of health and the education of health professionals. Health education is too important to be left only in the hands of entrenched health professionals. To date the university based health professions have shown a considerable opposition to the inclusion of other groups

into the university environment (witness medicine's unremitting opposition to the inclusion of chiropractic). It will require greater openness to new ideas and a tolerance of other paradigms than has been shown to date. Even within universities it has proven difficult to create an integrated approach to education with those currently part of the system.

"The difficulties encountered in interschool relationships within academic health centres do not reflect confusion or the inability to perceive how the situation could be improved. The problems are not obscure nor of such complexity that their solution exceeds the intellectual capacity of the principals involved. They exist because the individual professions have no basic motivation to solve them." 14

Acknowledgement

The author wishes to acknowledge the support of the Earl Homewood Scholarship from the Canadian Memorial Chiropractic College during the preparation of this manuscript.

References

- 1 Hon. J. Epp Address to the Canadian Public Health Association in Vancouver, June 1986, p. 3.
- 2 Achieving Health For All: A Framework For Health Promotion, Health and Welfare Canada, Ottawa, Gov. Printers, 1985.

- 3 Milio N. "Commentary Creating A Healthful Future", Community Health Studies V, ix 1985: 270–274.
- 4 Wellness Conference organized by Optima, Toronto, Nov. 1986. (quote distributed in the hand out materials)
- 5 Spitzer WD, Sachet WD, Sibley JC et al. The Burlington Randomized Trial for the Nurse Practitioner. N Engl J Med 1974; 290:252–256.
- 6 Kerr IM, Ogilvie CD. "Health Orientation in Medical Education, United States: The Texas College of Osteopathic Medicine". Preventative Medicine 10: 710-718, 1981, p. 713.
- 7 Wilk v AMA, 671 F.Supp. 1456, (ND III 1987), Aff'd, 895 F.2nd 352 (7th circuit 1990).
- 8 Gordon JS. "The Paradigm of Holistic Medicine" in Hastin A.C., et al. (eds) Health For the Whole Person, Boulder, Colorado, Westview Press, 1980; pp. 3-35.
- 9 Capra F. "Wholeness and Health". Holistic Medicine 1: 198:145-159.
- 10 Design of the Medical Curriculum in Relation to the Health Needs of the Nation. A Statement on the Educational Goals of the Texas College of Osteopathic Medicine, Forth Worth, Texas, 1980.
- 11 Kuhn T. The Structure of Scientific Resolutions. Chicago: University of Chicago Press, 1962.
- 12 Kidel M. "The Meaning of Illness". Holistic Medicine 1986; 1:15-26.
- 13 Physicians for the Twenty-First Century. Association of Medical Colleges. The GPEP Report 1984.
- 14 Ibid., p. 164.

COMING SOON...

SPORTMEDEX



& the Science of Rehabilitation

Finally, Canada's largest sports medicine product expo and conference.

"Movement is Life." - Aristotle

September 10 and 11, 1993 at the Metro Toronto Convention Centre

Door Prizes ★ Hourly Draws ★ Receptions ★ Lectures ★
 Continuing Education Sessions ★

Phone the show managers at Opal Communications Inc. today for more information: (416) 481-8384 or Fax (416) 481-7281